

Listing of Claims:

1. Cancelled.
2. Cancelled.
3. Cancelled.
4. Cancelled.
5. Cancelled.
6. Cancelled.
7. Cancelled.

8. (Currently Amended) A roll in a paper or board machine, said roll
comprising:

~~a roll for fitting~~ a tubular roll shell (2) ~~of a roll (1) in a paper or board machine;~~
~~said roll shell (2)~~ being supportable on a stationary roll shaft (3) by means of hydrostatic
slide bearing elements (4a, 4b; 4a', 4b'; 5a, 5b; 5a', 5b') acting on the roll shell (2) in
radially opposite directions at least in the direction of a first plane or a plane co-
directional with a primary loading (F) and a plane substantially lateral to the plane co-
directional with the primary loading (F), said slide bearing elements (4a, 4b, 4a', 4b', 5a,
5b, 5a', 5b') being loadable hydraulically by means of a pressure fluid, further
comprising:

a regulator (20) for adjusting a hydrostatic pressure of lateral bearing elements
(4a, 4b; 4a', 4b') acting in radially opposite directions on the roll shell (2) in a direction
substantially lateral to a plane co-directional with the primary loading (F), said regulator

(20) having feedback connection from main bearing elements (5a, 5b, 5a', 5b') acting in the direction of a plane co-directional with the primary loading (F) to comply with a predetermined ratio with maximum hydrostatic pressure of the main bearing elements (5a, 5b, 5a', 5b') substantially acting on the roll shell (2); said regulator (20) comprising a mechanical hydraulic valve which further comprises:

a cylindrical space (21) diametrically smaller at one end than at the other end;
a valve stem (22) adapted to be axially movable lengthwise in the cylindrical space (21);

two slides (23, 24) fitted in the cylindrical space (21) in connection with the valve stem (22), a first (23) of said slides being mounted on a first end of the valve stem (22) in a diametrically smaller cylindrical space (21a), and a second (24) of said slides, which is provided with a spring (26), being mounted, in connection with the valve stem (22), in a diametrically larger cylindrical space (21b, 21c), whereby a pressure fluid is suppliable to at least one lateral bearing element (4a, 4a', 4b, 4b'); and

a regulator element (25), which is fitted in connection with a second end of the valve stem (22) as well as in connection with a feed line (P) for a hydraulic pressure fluid, and that the first slide (23) is subjectable to a hydrostatic control pressure consistent with a hydrostatic pressure acting on hydrostatic slide bearing elements (5a, 5a', 5b, 5b') which work against the spring (26) and act on a roll shell (2) in a plane co-directional with a primary loading (F) for operating the valve stem (22) and the regulator element (25) in such a way- that the hydraulic pressure fluid has access from the feed line (P) into the larger cylindrical space (21b, 21c) of the valve (20) in view of regulating a supply pressure delivered to at least one lateral bearing element (4a, 4a', 4b, 4b').

9. (Previously Presented) A roll as set forth in claim 8, wherein a one of said lateral bearing elements (4b, 4b') is suppliable with a constant pressure and an other of said lateral bearing elements (4a, 4a') is suppliable by way of a regulator (20) with a control pressure depending on the maximum pressure of the main bearing elements (5a, 5b, 5a', 5b').

10. Cancelled

11. Cancelled

12. (Previously Presented) A roll as set forth in claim 8, wherein the regulator (20) comprises:

an electrically controlled valve, said electrically-controllable valve obtaining a control from one of a pair of pressure detectors (52, 53) located along a transit path (8, 8', 9', 10) established between the pressure detectors (52, 53) and the regulator (20), said electrically-controlled valve being mounted in connection with the main bearing elements (5a, 5a', 5b, 5b') acting on the roll shell (2) in the direction of a plane co-directional with the loading (F).

13. (Previously Presented) A roll as set forth in claim 8, wherein the regulator (20) is connected with a feed line (P) of one lateral bearing element (4a), said one lateral bearing element (4a) being further provided with a control device (42) for delivering a

hydraulic pressure to another opposite lateral bearing element (4b), wherein the shell remains laterally immobilized relative to the roll shaft (3).

14. Cancelled.

15. Cancelled.